

CLAIMS

1. A therapeutic and/or preventive agent for inner ear disorders comprising an IL-6 antagonist as an active ingredient.

5        2. The therapeutic and/or preventive agent according to claim 1 wherein said inner ear disorders are sensorineural hearing loss.

3. The therapeutic and/or preventive agent according to claim 2 wherein said sensorineural hearing  
10        loss is sensorineural hearing loss caused by Meniere's disease, drug-induced inner ear disorders, viral inner ear disorders, purulent inner ear disorders, temporal bone fracture or acoustic nerve tumor.

4. The therapeutic and/or preventive agent  
15        according to claim 2 wherein said sensorineural hearing loss is sudden deafness, senile deafness or noise deafness.

5. The therapeutic and/or preventive agent according to claim 1 wherein said inner ear disorders are  
20        vestibular disorders.

6. The therapeutic and/or preventive agent according to claim 5 wherein said vestibular disorders are vestibular disorders caused by Meniere's disease, vestibular neuronitis or drug-induced inner ear  
25        disorders.

7. The therapeutic and/or preventive agent according to any one of claims 1 to 6 wherein said IL-6 antagonist is an antibody against IL-6 receptor.

8. The therapeutic and/or preventive agent  
30        according to claim 7 wherein said antibody against IL-6 receptor is a monoclonal antibody against IL-6 receptor.

9. The therapeutic and/or preventive agent according to claim 8 wherein said antibody against IL-6  
35        receptor is a monoclonal antibody against human IL-6 receptor.

10. The therapeutic and/or preventive agent according to claim 8 wherein said antibody against IL-6

receptor is a monoclonal antibody against mouse IL-6 receptor.

11. The therapeutic and/or preventive agent according to any one of claims 7 to 10 wherein said  
5 antibody against IL-6 receptor is a recombinant antibody.

12. The therapeutic and/or preventive agent according to claim 9 wherein said monoclonal antibody against human IL-6 receptor is PM-1 antibody.

13. The therapeutic and/or preventive agent  
10 according to claim 10 wherein said monoclonal antibody against mouse IL-6 receptor is MR16-1 antibody.

14. The therapeutic and/or preventive agent according to any one of claims 7 to 13 wherein said antibody against IL-6 receptor is a chimeric antibody, a  
15 humanized antibody, or a human antibody against IL-6 receptor.

15. The therapeutic and/or preventive agent according to claim 14 wherein said humanized antibody against IL-6 receptor is a humanized PM-1 antibody.

20 16. The use of an IL-6 antagonist for the manufacture of a preventive and/or therapeutic agent for inner ear disorders.

17. The use according to claim 16 wherein said inner ear disorders are sensorineural hearing loss.

25 18. The use according to claim 17 wherein said sensorineural hearing loss is sensorineural hearing loss caused by Meniere's disease, drug-induced inner ear disorders, viral inner ear disorders, purulent inner ear disorders, temporal bone fracture or acoustic nerve  
30 tumor.

19. The use according to claim 17 wherein said sensorineural hearing loss is sudden deafness, senile deafness or noise deafness.

35 20. The use according to claim 16 wherein said inner ear disorders are vestibular disorders.

21. The use according to claim 20 wherein said vestibular disorders are vestibular disorders caused by

Meniere's disease, vestibular neuronitis or drug-induced inner ear disorders.

5       22. The use according to any one of claims 16 to 21 wherein said IL-6 antagonist is an antibody against IL-6 receptor.

      23. The use according to claim 22 wherein said antibody against IL-6 receptor is a monoclonal antibody against IL-6 receptor.

10       24. The use according to claim 23 wherein said antibody against IL-6 receptor is a monoclonal antibody against human IL-6 receptor.

      25. The use according to claim 23 wherein said antibody against IL-6 receptor is a monoclonal antibody against mouse IL-6 receptor.

15       26. The use according to any one of claims 22 to 25 wherein said antibody against IL-6 receptor is a recombinant antibody.

20       27. The use according to claim 24 wherein said monoclonal antibody against human IL-6 receptor is PM-1 antibody.

      28. The use according to claim 25 wherein said monoclonal antibody against mouse IL-6 receptor is MR16-1 antibody.

25       29. The use according to any one of claims 22 to 28 wherein said antibody against IL-6 receptor is a chimeric antibody, a humanized antibody, or a human antibody against IL-6 receptor.

30       30. The use according to claim 29 wherein said humanized antibody against IL-6 receptor is a humanized PM-1 antibody.

      31. A therapeutic and/or preventive method for inner ear disorders of a subject which comprises administering an IL-6 antagonist to the subject.

35       32. The therapeutic and/or preventive method according to claim 31 wherein said inner ear disorders are sensorineural hearing loss.

      33. The therapeutic and/or preventive method

according to claim 32 wherein said sensorineural hearing loss is sensorineural hearing loss caused by Meniere's disease, drug-induced inner ear disorders, viral inner ear disorders, purulent inner ear disorders, temporal bone fracture or acoustic nerve tumor.

34. The therapeutic and/or preventive method according to claim 32 wherein said sensorineural hearing loss is sudden deafness, senile deafness or noise deafness.

35. The therapeutic and/or preventive method according to claim 31 wherein said inner ear disorders are vestibular disorders.

36. The therapeutic and/or preventive method according to claim 35 wherein said vestibular disorders are vestibular disorders caused by Meniere's disease, vestibular neuronitis or drug-induced inner ear disorders.

37. The therapeutic and/or preventive method according to any one of claims 31 to 36 wherein said IL-6 antagonist is an antibody against IL-6 receptor.

38. The therapeutic and/or preventive method according to claim 37 wherein said antibody against IL-6 receptor is a monoclonal antibody against IL-6 receptor.

39. The therapeutic and/or preventive method according to claim 38 wherein said antibody against IL-6 receptor is a monoclonal antibody against human IL-6 receptor.

40. The therapeutic and/or preventive method according to claim 38 wherein said antibody against IL-6 receptor is a monoclonal antibody against mouse IL-6 receptor.

41. The therapeutic and/or preventive method according to any one of claims 37 to 40 wherein said antibody against IL-6 receptor is a recombinant antibody.

42. The therapeutic and/or preventive method according to claim 39 wherein said monoclonal antibody against human IL-6 receptor is PM-1 antibody.

43. The therapeutic and/or preventive method according to claim 40 wherein said monoclonal antibody against mouse IL-6 receptor is MR16-1 antibody.

5 44. The therapeutic and/or preventive method according to any one of claims 37 to 43 wherein said antibody against IL-6 receptor is a chimeric antibody, a humanized antibody, or a human antibody against IL-6 receptor.

10 45. The therapeutic and/or preventive method according to claim 44 wherein said humanized antibody against IL-6 receptor is a humanized PM-1 antibody.